



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,458	10/27/2003	Brian E. Joseph	07620001C1	2930
48642	7590	04/05/2006	EXAMINER	
PHILIP D. LANE P.O. BOX 79318 CHARLOTTE, NC 28271-7063			BAHTA, ABRAHAM	
			ART UNIT	PAPER NUMBER

1744

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Cu

Office Action Summary	Application No.	Applicant(s)	
	10/693,458	JOSEPH, BRIAN E.	
	Examiner	Art Unit	
	Abraham Bahta	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01/17/06.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16, 17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16, 17, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 17, 2006 has been entered.

It is noted that this Office Action is in response to the request for continued examination on January 17, 2006. The previous Office Action mailed on January 20, 2006 can be disregarded and the period for reply will be restarted with the mailing of this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 16-17 and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Rogers (USP 6,656,238).

Rogers teaches coal-based carbon foam having thermal conductivity of generally less than about 1.0 w/m degree K. See col. 1, lines 49-66 and col. 2, lines 57-59.

Rogers teaches the end point 0.1 and up to 0.5 range, therefore for these points this reference is 102.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-17 and 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Stiller et al (USP 5,888,469).

Stiller et al teach a thermal insulator comprising carbon foam. The foam may have a bulk density of about 0.2 to 2g/cc that overlap with the claimed range. See col. 5, lines 12-35, col. 6, lines 17-19 and 45-46. Thus, the foam is expected to have similar thermal conductivity as the foam of the subject application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stiller et al '469.

Claims 19-20 of the subject application differ in that Stiller et al '469 does not teach the exact same proportions (density of 0.1 to 0.2g/cm³); as cited in the claims; however, one of ordinary skill in the art at time of the invention was made would have

considered the invention to have been obvious because the compositional proportions taught by Stiller et al '469 overlap the instantly claimed proportions and therefore are considered to establish a prima facie case of obviousness. It would have been obvious to one of ordinary skill in the art to select any portion of the disclosed ranges including the instantly claimed ranges from the ranges disclosed in the prior art reference, particularly in view of the fact that;

"The normal desire of scientists or artisans to improve on what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages. In re Peterson 65 USPQ 2d 1379 (CAFC 2003).

Claim Rejections - 35 USC § 103

Claims 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers.

As discussed above, Rogers teaches applicant's claimed invention except a density ranging from about 0.1 to about 0.8 g/cmc; however, Rogers teaches the carbon foam may have a density ranging from about 0.01 to about 0.5 g/cmc. See col. 2, lines 21-22.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have varied the density of the product in order to achieve the desired thermal conductivity because discovering the optimum or workable ranges involves only routine skill in the art.

Response to Applicant's Arguments

Applicant's response filed 09/07/04 states that claim 16 has been amended to include the density range limitation of claim 18 and contends that based on this amendment amended claim 16 is not anticipated by Rogers; however, The Examiner notes that claim 16 does not mention any density range.

Applicant argues in the response filed 09/07/04 that the present application and the reference Rogers are owned by the same entity. However, Applicant has not shown that the application and reference were commonly owned at the time of the invention (see MPEP 706.02 (I)(2) and 706.02(I)(3).

Applicant argues in the response filed March 3, 2005 that the amendment to the claims that the foam is produced directly from particulate coal overcomes the rejection over Stiller. The product in Stiller is considered to meet the limitation of the claimed product. Product by process claims are not limited to the manipulations of the recited steps (see MPEP 2113).

Terminal Disclaimer

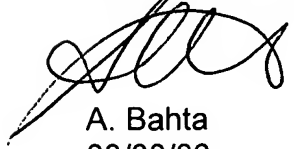
Receipt of the Terminal Disclaimer filed on January 17, 06 is acknowledged.

It is noted that the TD filed 1/17/06 is a duplicate of the one filed 12/16/05.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abraham Bahta whose telephone number is (571) 272-1532. The examiner can normally be reached on Monday - Friday; 11:30 am - 8:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A. Bahta
03/30/06



GLADYS JP CORCORAN
SUPERVISORY PATENT EXAMINER